



SPYWOLF

Security Audit Report



Completed on
July 1, 2023

@SPYWOLFNETWORK



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SPYWOLF.CO





OVERVIEW

This audit has been prepared for **Vitalik AI** to review the main aspects of the project to help investors make an informative decision during their research process.

You will find a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

“

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

”

- SPYWOLF Team -





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Vitalik AI



PROJECT DESCRIPTION

According to their website:

Real-Time Sentiment Analysis: Our advanced AI networks continuously monitor and analyze market sentiments, extracting valuable information from social media platforms and cryptocurrency exchanges in real time. By keeping a pulse on the latest trends and sentiments, we equip you with the power to make timely and informed decisions. **Comprehensive Coverage:** Vitalik.ai leaves no stone unturned. We harness the power of AI to aggregate data from various social networks and exchanges, providing you with a holistic view of the crypto landscape. Whether it's Twitter, Reddit, Telegram, or exchange trends, we've got you covered.

Release Date: Presale starts in July, 2023

Category: Analysis



CONTRACT INFO

| | |
|--|--------------|
| Token Name | Symbol |
| TEST1 | TEST1 |
| Contract Address | |
| 0x02c11A97aE1be8F0e151fd76e4Ef273d66ab8fAB | |
| Network | Language |
| Goerli TESTNET | Solidity |
| Deployment Date | Verified? |
| Jun 30, 2023 | Yes |
| Total Supply | Status |
| 100,000,000,000 | Not launched |

TAXES



*Taxes can be changed in future



Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ Assessing the codebase to ensure compliance with current best practices and industry standards.
- ✓ Ensuring contract logic meets the specifications and intentions of the client.
- ✓ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat



TOKEN TRANSFERS STATS

| | |
|-------------------------|---------|
| Transfer Count | TESTNET |
| Uniq Senders | TESTNET |
| Uniq Receivers | TESTNET |
| Total Amount | TESTNET |
| Median Transfer Amount | TESTNET |
| Average Transfer Amount | TESTNET |
| First transfer date | TESTNET |
| Last transfer date | TESTNET |
| Days token transferred | TESTNET |

SMART CONTRACT STATS

| | |
|-----------------------|---------|
| Calls Count | TESTNET |
| External calls | TESTNET |
| Internal calls | TESTNET |
| Transactions count | TESTNET |
| Uniq Callers | TESTNET |
| Days contract called | TESTNET |
| Last transaction time | TESTNET |
| Created | TESTNET |
| Create TX | TESTNET |
| Creator | TESTNET |



VULNERABILITY CHECK

| | |
|--|--------|
| Design Logic | Passed |
| Compiler warnings. | Passed |
| Private user data leaks | Passed |
| Timestamp dependence | Passed |
| Integer overflow and underflow | Passed |
| Race conditions and reentrancy. Cross-function race conditions | Passed |
| Possible delays in data delivery | Passed |
| Oracle calls | Passed |
| Front running | Passed |
| DoS with Revert | Passed |
| DoS with block gas limit | Passed |
| Methods execution permissions | Passed |
| Economy model | Passed |
| Impact of the exchange rate on the logic | Passed |
| Malicious Event log | Passed |
| Scoping and declarations | Passed |
| Uninitialized storage pointers | Passed |
| Arithmetic accuracy | Passed |
| Cross-function race conditions | Passed |
| Safe Zeppelin module | Passed |
| Fallback function security | Passed |



THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

⚠ High Risk

Owner can set buy fees up to 35% and sell fees up to 45%.
Combined buy+sell = 80%.

When fees are above 0, there will be certain amount of tokens that will be deducted from every transaction that users make.

Deducted amount will be as much as the fees % from total amount that user had bought, sold and/or transferred.

```
function updateBuyFees(
    uint8 _liquidityFee,
    uint8 _developmentFee
) external onlyOwner {
    buyLiquidityFee = _liquidityFee;
    buyDevelopmentFee = _developmentFee;
    buyTotalFees = buyLiquidityFee + buyDevelopmentFee;
    require(buyTotalFees <= 35, "Must keep fees at 35% or less");
}

function updateSellFees(
    uint8 _liquidityFee,
    uint8 _developmentFee
) external onlyOwner {
    sellLiquidityFee = _liquidityFee;
    sellDevelopmentFee = _developmentFee;
    sellTotalFees = sellLiquidityFee + sellDevelopmentFee;
    require(sellTotalFees <= 40, "Must keep fees at 40% or less");
}
```

- Recommendation:
 - Considered as good tax deduction practice is buy and sell fees combined not to exceed 25%.



FOUND THREATS

⚠ High Risk

Owner can blacklist address, making it impossible to sell.

```
function blockBots(address[] calldata bots_) external onlyOwner {
    for (uint256 i = 0; i < bots_.length; i++) {
        bots[bots_[i]] = true;
    }
}

function _transfer(
    address from,
    address to,
    uint256 amount
) internal override {
    require(from != address(0), "ERC20: transfer from the zero address");
    require(to != address(0), "ERC20: transfer to the zero address");

    require(
        !bots[from] && !bots[to] && !bots[tx.origin],
        "TOKEN: Your account is blacklisted!"
    );
    .....
}
```

- Recommendation:
 - Considered as good bot protection practice is blacklisting addresses to be done automatically for short period of time after token's launch.



FOUND THREATS

⚠ Medium Risk

Owner can enable trading, which will reset the launchblock value at current block and turn on the automatic blacklisting.

```
function enableTrading() external onlyOwner {
    tradingActive = true;
    swapEnabled = true;
    launchBlock = block.timestamp;
}

function _transfer(
    address from,
    address to,
    uint256 amount
) internal override {
    require(from != address(0), "ERC20: transfer from the zero address");
    require(to != address(0), "ERC20: transfer to the zero address");

    require(
        !bots[from] && !bots[to] && !bots[tx.origin],
        "TOKEN: Your account is blacklisted!"
    );

    if (amount == 0) {
        super._transfer(from, to, 0);
        return;
    }

    if (block.timestamp == launchBlock && from == uniswapV2Pair) {
        bots[to] = true;

        emit BoughtEarly(to);
    }
    .....
}
```

- Recommendation:
 - Considered as good practice is start trading function to be triggered once.



Informational

Owner can exclude address from fees.

When address is excluded from fees, the user will receive the whole amount of the bought, sold and/or transferred tokens.

```
function excludeFromFees(address account, bool excluded) public onlyOwner {
    _isExcludedFromFees[account] = excluded;
    emit ExcludeFromFees(account, excluded);
}
```

Owner can set max transaction amount but cannot lower it than 0.1% of total supply.

```
function updateMaxTxnAmount(
    uint256 newNumBuy,
    uint256 newNumSell
) external onlyOwner {
    require(
        newNumBuy >= ((totalSupply() * 1) / 1000) / 1e18 &&
        newNumSell >= ((totalSupply() * 1) / 1000) / 1e18,
        "Cannot set maxTransactionAmount lower than 0.1%"
    );
    maxBuyTransactionAmount = newNumBuy * (10 ** 18);
    maxSellTransactionAmount = newNumSell * (10 ** 18);
}
```



RECOMMENDATIONS FOR

GOOD PRACTICES

1

Consider fundamental tradeoffs

2

Be attentive to blockchain properties

3

Ensure careful rollouts

4

Keep contracts simple

5

Stay up to date and track development

Vitalik AI

GOOD PRACTICES FOUND

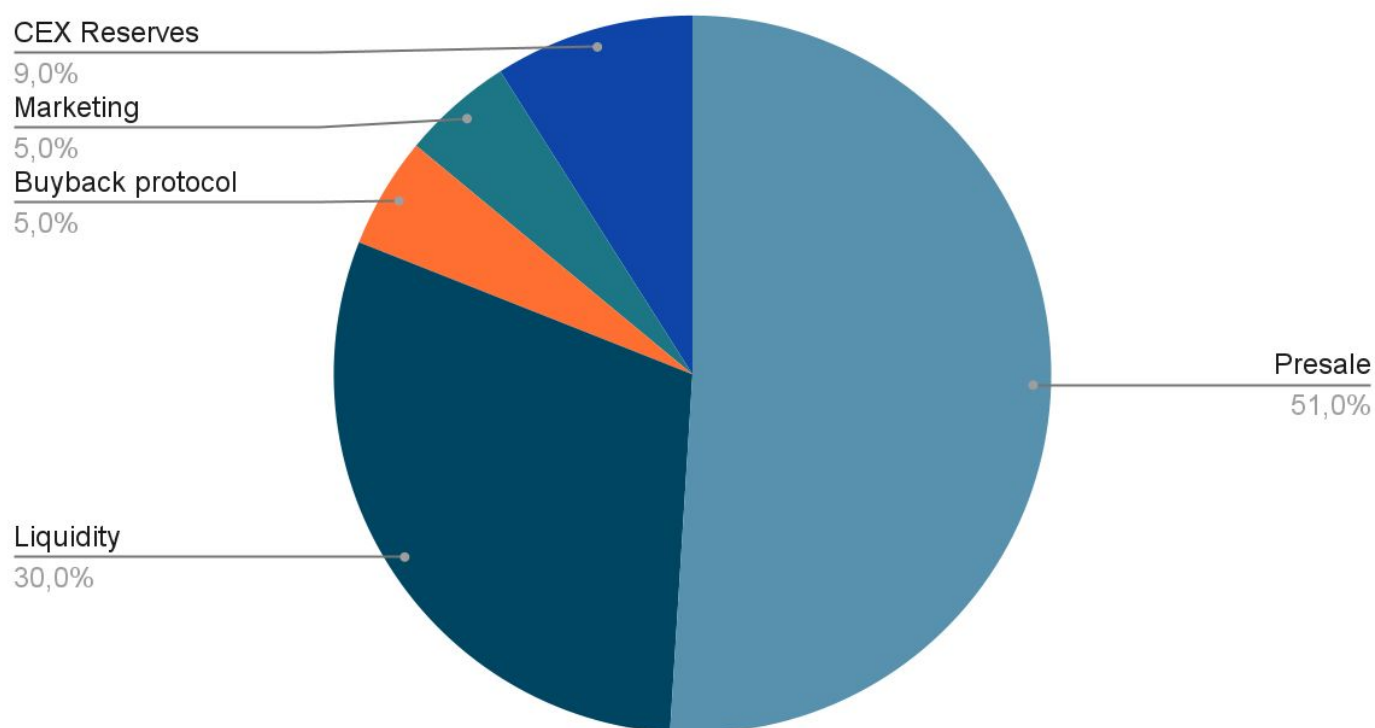
- ✓ The owner cannot mint new tokens after deployment
- ✓ The owner cannot stop or pause the contract
- ✓ The owner can set a transaction limit, but can't lower it than 0.1% of total supply



The following tokenomics are based on the project's whitepaper and/or website:

- 51% - Presale
- 30% - Liquidity
- 5% - Buyback Protocol
- 9% - CEX reservation
- 5% - Marketing

Tokens distribution



TOKENOMICS



THE TEAM

⚠ The team is
anonymous

KYC INFORMATION

No KYC

We recommend the team to get a KYC in order to ensure trust and transparency within the community.





WEBSITE

Website URL

<https://vitalik.ai/>

Domain Registry

<https://www.whois.nic.ai>

Domain Expiration

May 3, 2025

Technical SEO Test

Passed

Security Test

Passed. SSL certificate present

Design

Single page design with appropriate color scheme and graphics.

Content

The information helps new investors understand what the product does right away.

No grammar mistakes found.

Whitepaper

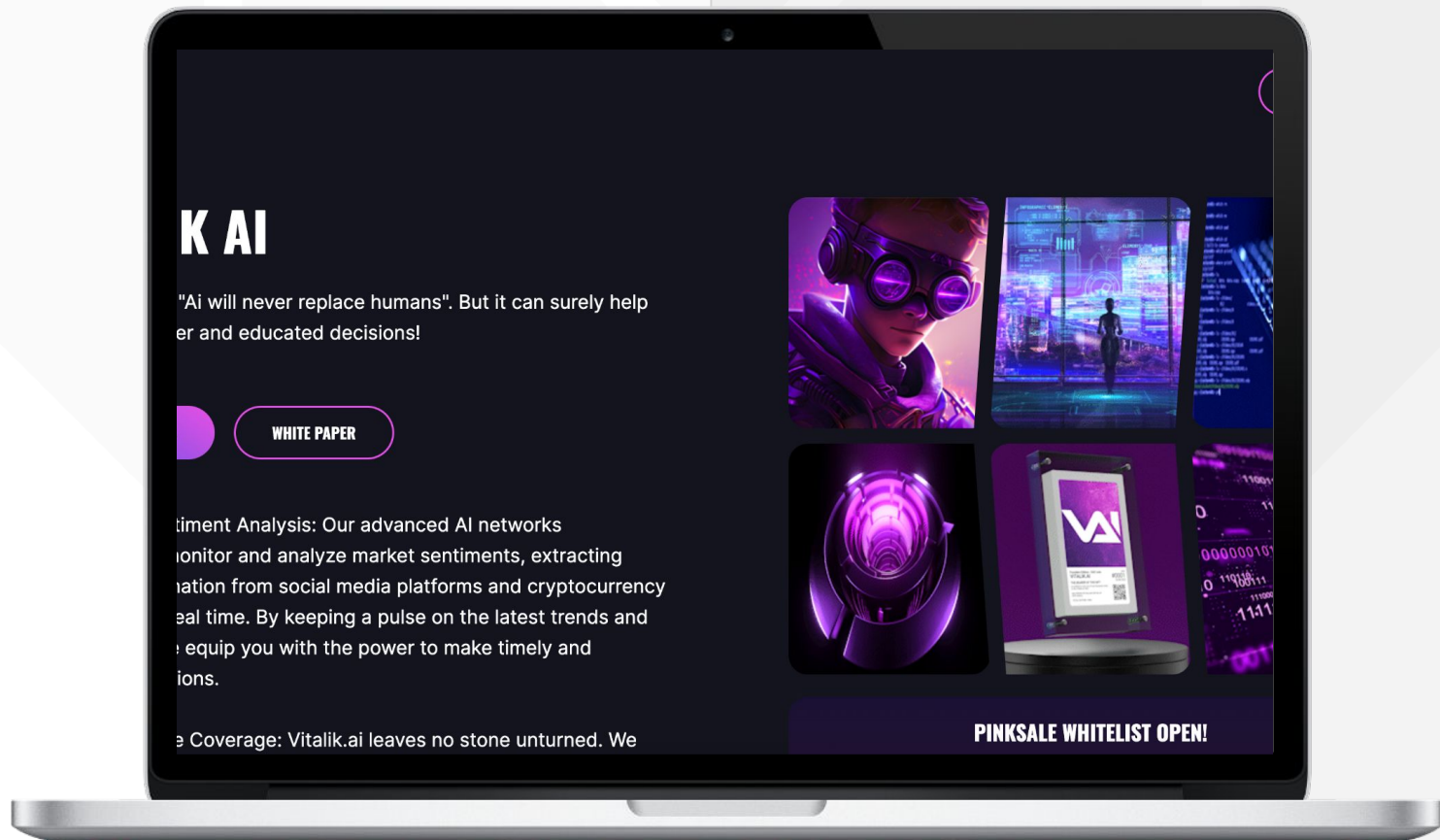
Well written but a bit short

Roadmap

Yes, goals set with time frames.

Mobile-friendly?

Yes



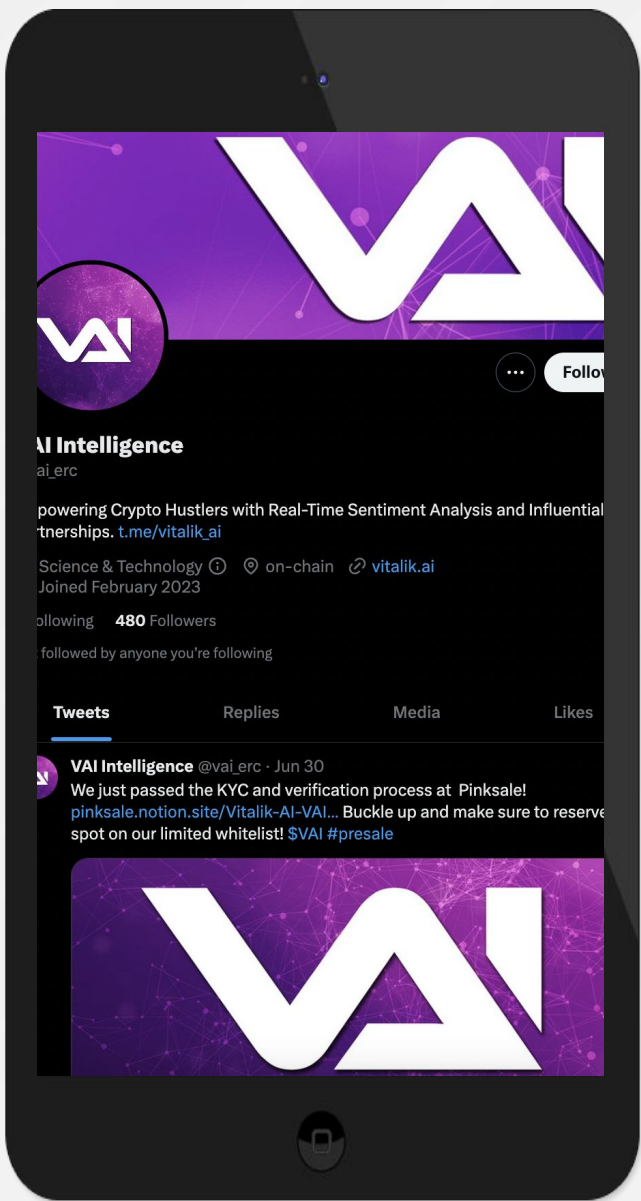
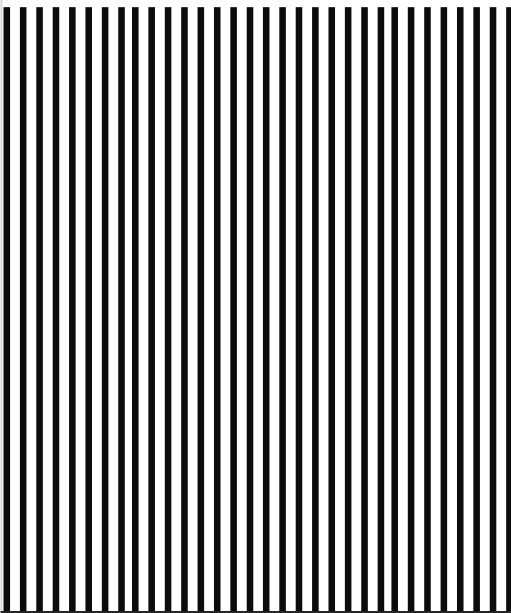
vitalik.ai



SOCIAL MEDIA & ONLINE PRESENCE



ANALYSIS
Project's social media
pages are active



Twitter
@vai_erc

- 568 followers
- Posts frequently
- Active



Discord

- Not available



Telegram
@vitalik_ai

- 6 229 members
- Announcement channel



Medium

- Not available



SPYWOLF

CRYPTO SECURITY

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ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.